

CPA 130
Power Amplifier
Operation Manual

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INTRODUCTION

CPA130 dual channel power amplifiers are designed to supply reliable service in permanent installations. CPA130 amplifiers have complete short-circuit and thermal protection with automatic reset. Barrier strip input and 5-way binding post output connectors provide trouble free, dependable connections. CPA130 amplifiers are passively cooled for quiet operation, without fan noise or filter maintenance. CPA130 amplifiers carry a five-year warranty.

CPA130 features include:

- ◆ balanced inputs on barrier strip terminals
- ◆ 65 watts/channel @ 4 ohms (stereo)
- ◆ 40 watts/channel @ 8 ohms (stereo)
- ◆ 130 watts @ 8 ohms (mono bridge)
- ◆ peak indicators on each channel
- ◆ detented level controls (front or rear mounting)
- ◆ complete short-circuit and thermal protection
- ◆ turn-on muting to prevent "thumping"
- ◆ selectable stereo or mono bridge operation
- ◆ internal jumpers select HPF (18dB/octave @ 180Hz)
- ◆ passively cooled (no fan noise or maintenance)
- ◆ optional distribution autoformers (rear panel mounting)
- ◆ covered by Biamp Systems' five-year warranty

IMPORTANT SAFETY INSTRUCTIONS

Read these instructions.

Keep these instructions.

Heed all warnings.

Follow all instructions.

Do not use this apparatus near water.

Clean only with a dry cloth.

Do not block any of the ventilation openings.

Install in accordance with the manufacturers instructions.

WARNING - To reduce the risk of electric shock, do not expose this apparatus to rain or moisture.

The apparatus shall not be exposed to dripping or splashing and no objects, such as vases, shall be placed on the apparatus.

Unplug this apparatus during lightning storms or when unused for long periods of time.

Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. When the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

Use only attachments/accessories specified by the manufacturer.

Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



Unplug this apparatus during lightning storms or when unused for long periods of time.

The appliance inlet shall be readily operable once installed.

WARNING - Terminals marked with the following symbol are Hazardous. Connections to these terminals must be made by qualified personnel.



SAFETY INFORMATION

The words **WARNING** and **CAUTION** throughout the manual, and on the device, call attention to important safety information. These words have the following meanings.

WARNING: The related information alerts you to conditions that could result in serious injury or damage to property if the instructions are not followed properly.

CAUTION: The related information instructs you on how to prevent damage to the equipment or how to avoid conditions that could result in minor injury if proper steps are not followed.

Product labelling and the operation manual may use the internationally recognized symbols defined below to note safety messages.



The lightning flash with arrowhead symbol, enclosed within a triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the apparatus's enclosure or at connection terminals that may be of sufficient magnitude to constitute a risk of electrical shock.



The exclamation point, enclosed within a triangle, is intended to alert the user to important installation, operation, and maintenance (servicing) instructions in the literature accompanying the apparatus.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRICAL SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE.

CAUTION: Installation of this apparatus should be made by a qualified installation person and should conform to all applicable local codes.



Modification and optional equipment information referenced in this manual is for use by qualified installation and service personnel only.

	CAUTION RISK OF ELECTRICAL SHOCK. DO NOT OPEN.	
CAUTION: TO REDUCE THE RISK OF ELECTRICAL SHOCK, DO NOT REMOVE COVER. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.		

"INFORMACIÓN DE SEGURIDAD"

Las palabras **PELIGRO** (WARNING) y **PRECAUCIÓN** (CAUTION) a lo largo del manual y en el dispositivo (sistema), llaman la atención acerca de una importante información de seguridad. Estas palabras tienen los siguientes significados:

PELIGRO : la información relata las condiciones en que podría ser dañada seriamente la propiedad si no se siguen adecuadamente las instrucciones.

PRECAUCIÓN : la información que se relata le instruye en cómo prevenir daños al equipo o como evitar condiciones que podrían resultar en perjuicio menor si los pasos adecuados no son seguidos correctamente.

El etiquetado del producto y el manual de operación pueden hacer uso de los símbolos reconocidos internacionalmente y cuyos mensajes están definidos a continuación para modificar mensajes de seguridad:



El símbolo del rayo encerrado en un triángulo pretende alertar al usuario de la presencia de un peligroso voltaje no aislado, dentro de la caja del aparato o a un terminal de conexión y que podría ser de suficiente magnitud como para constituir un grave riesgo de descarga eléctrica.



El punto de exclamación dentro de un triángulo pretende alertar al usuario de la importancia de las instrucciones de instalación, operación y mantenimiento (servicio) que acompañan al aparato.

PELIGRO : para reducir el riesgo de fuego o una descarga eléctrica, no exponer este aparato a la lluvia o la humedad.

PRECAUCIÓN : la instalación de este aparato debería hacerse por una persona cualificada en la instalación, y debería conformar todos los códigos locales aplicables.



La modificación y la información opcional del equipo referenciada en este manual es para ser utilizada únicamente por personal cualificado en instalación y servicio.

	PRECAUCIÓN RIESGO DE DESCARGA ELÉCTRICA NO AISLAR.	
PRECAUCIÓN: para reducir el riesgo de descarga eléctrica no levantar la tapa. NO EXISTEN COMPONENTES DE SERVICIO EN EL INTERIOR. REFERIRSE ÚNICAMENTE A PERSONAL CUALIFICADO PARA SERVICIO TÉCNICO.		

INFORMATION CONCERNANT VOTRE SECURITE

Les mots **WARNING** et **CAUTION** dans le manuel d'utilisation et sur les appareils attirent votre attention sur les plus importantes informations concernant votre sécurité. Ces mots ont la signification suivante:

WARNING: Ce mot vous indique les circonstances dans lesquelles vous pourriez être blessé ou endommager votre équipement si les instructions ne sont pas suivies correctement.

CAUTION: Ce mot vous indique comment éviter d'endommager votre matériel et comment éviter de vous blesser si vous ne suivez pas les instructions.

Vous trouverez peut-être les symboles suivants sur votre appareil ou dans le manuel d'utilisation.



L'éclair se terminant en flèche dans un triangle permet de prévenir l'utilisateur d'un voltage dangereux non isolé dans l'appareil ou d'une connexion d'une amplitude suffisante pour constituer un risque de choc électrique.



Le point d'exclamation dans un triangle permet de prévenir l'utilisateur des points importants concernant l'installation, le fonctionnement et l'entretien de l'appareil figurant dans le manuel d'utilisation.

WARNING: POUR REDUIRE LES RISQUES DE FEU OU DE CHOC ELECTRIQUE, NE PAS METTRE L'APPAREIL SOUS LA PLUIE OU DANS L'HUMIDITE.

CAUTION: L'installation de cet appareil doit être faite par un installateur qualifié et doit être en conformité avec toutes les lois locales en application.



Les informations concernant une modification ou un équipement en option dans le manuel doivent être effectués par du personnel qualifié.

	ATTENTION: Risque de choc électrique, ne pas enlever le couvercle.	
ATTENTION: L'entretien des pièces intérieures ne peut pas être fait par des personnes non qualifiées. Faire faire l'entretien uniquement par du personnel qualifié.		

INFORMAZIONI PER LA SICUREZZA

Le parole **AVVERTENZA** (WARNING) e **PRUDENZA** (CAUTION) poste sul manuale d'uso e sul apparato richiamano la vostra attenzione su delle importanti informazioni per la vostra sicurezza. Queste parole hanno il seguente significato.

AVVERTENZA: La suddetta indicazione vi avvisa sul rischio di incorrere in danni a cose o a persone, se le procedure d'uso e installazione non saranno seguite propriamente.

PRUDENZA: La suddetta indicazione vi istruisce su come prevenire e ridurre al minimo, il rischio di danni agli apparati e alle persone se le istruzioni saranno seguite propriamente.

Le apparecchiature e i manuali di istruzioni riporteranno la simbologia standard raffigurata qui sotto, accompagnate dalle relative informazioni per la sicurezza.



La simbologia con il fulmine all'interno di un triangolo, intende avvisare l'utente della presenza di alto voltaggio all'interno dell'apparecchio in questione, e che il suddetto apparecchio si alimenta attraverso una tensione di rete ad alto voltaggio e che dunque si potrebbe incorrere sul rischio di una possibile scossa elettrica.



La simbologia con il punto esclamativo all'interno di un triangolo, intende avvisare l'utente di una serie di istruzioni contenute nel manuale d'uso riguardanti: operato, manutenzione e assistenza. Il suddetto manuale sarà a corredo dell'apparecchio.

AVVERTENZA: PER RIDURRE IL RISCHIO DI POSSIBILI INCENDI O SCOSSE ELETTRICHE, SCONSIGLIAMO DI ESPORRE L'APPARECCHIO ALLA PIOGGIA O ALL'UMIDITA'.

PRUDENZA: L'installazione di questo apparato dovrà essere effettuata solo da personale qualificato e il tipo di installazione dovrà essere in regola con le norme vigenti locali.



Modifiche e ulteriori informazioni specificate in questo manuale sono solamente riservate al personale qualificato all'installazione.

	Attenzione Pericolo di scosse elettriche. Non aprire l'apparecchio.	
PRUDENZA: a scopo di ridurre la possibilità di incorrere in scosse elettriche, vi consigliamo di non rimuovere il coperchio di chiusura dell'apparecchio. Nessuna parte di manutenzione all'interno dell'apparecchio! Per ogni necessità di servizio e manutenzione rivolgersi al personale qualificato.		

Sicherheitshinweise

Die Begriffe **WARNUNG** (engl. WARNING) und **ACHTUNG** (engl. CAUTION) in der Bedienungsanleitung und auf den Geräten machen auf wichtige Sicherheitsinformationen aufmerksam. Diese Begriffe haben die folgende Bedeutung:

WARNUNG: Der folgende Text warnt Sie vor ernsthaften Verletzungen oder Beschädigungen, (WARNING) die aus einer fehlerhaften Bedienung bzw. Handhabung des Gerätes resultieren können.

ACHTUNG: Der folgende Text informiert Sie über Bedienungshinweise zum Schutz Ihres Gerätes oder weist auf mögliche Schäden hin, wenn die Bedienungshinweise nicht beachtet werden. (CAUTION)

Die Beschriftung der Geräte und die Bedienungsanleitungen weisen unter Umständen international bekannte Symbole auf, die die folgende Bedeutung haben:



Das Blitzsymbol im Dreieck warnt vor anliegender, nicht isolierter „gefährlicher Spannung“ im Inneren oder an den Anschlüssen des Gerätes. Die Berührung der unter Spannung stehenden Teile kann zu einem elektrischen Schock führen.



Das Ausrufezeichen im Dreieck macht auf wichtige Installations-, Bedienungs- und Servicehinweise in der zugehörigen Bedienungsanleitung aufmerksam.

WARNUNG: Zur Minderung des Risikos von Feuer und elektrischem Schock schützen Sie das Gerät vor Regen und Feuchtigkeit. (WARNING)

ACHTUNG: Die Installation des Gerätes sollte nur durch qualifiziertes Personal durchgeführt werden und muß den jeweiligen Bestimmungen entsprechen. (CAUTION)



Die Modifikationen und die Informationen zu den optionalen Erweiterungen in der Bedienungsanleitung sind nur für qualifiziertes Personal bestimmt.

	ACHTUNG Risiko von elektrischem Schock Gerät nicht öffnen	
Achtung: Zur Minderung des Risikos von elektrischem Schock das Gerät nicht öffnen. Keine Bedienungselemente im Inneren des Gerätes. Service nur durch qualifiziertes Personal durchführen lassen.		

Sikkerhedsinformation

Ordene **ADVARSEL** (WARNING) og **FORSIGTIG** (CAUTION), brugt i henholdsvis brugervejledning og på selve produktet, indikerer, at vigtig information omkring sikkerhed følger. Ordene betyder følgende:

ADVARSEL: Den efterfølgende information advarer Dem om forhold, der kan føre til alvorlige ulykker og ejendomsskader, hvis ikke vejledningen følges. (WARNING)

FORSIGTIG: Den efterfølgende information vejleder Dem i, hvordan De undgår skade på produktet, samt undgår forhold der kan føre til mindre ulykker og ejendomsskader, hvis ikke vejledningen følges. (CAUTION)

Produktetiketter og brugervejledning kan indeholde de internationalt anerkendte symboler der er vist nedenfor:



Trekanten med et lyn i midten har til hensigt at advare brugeren om, at produktet indeholder "farlig spænding", og at det derfor er forbundet med fare for elektrisk stød at åbne produktet.



Trekanten med udråbstegn har til hensigt at advare brugeren om, at vigtig information omkring installation, brug, service og vedligeholdelse af produktet er indeholdt i den medfølgende brugervejledning.

ADVARSEL: Med henblik på at reducere risikoen for brand eller elektrisk stød, må produktet ikke udsættes for regn eller fugt. (WARNING)

FORSIGTIG: Installation af dette produkt skal foretages af en autoriseret installatør og skal være i overensstemmelse med alle anvendelige lokale retningslinier. (CAUTION)



Modifikationer samt alternativt udstyr beskrevet i denne brugervejledning er kun henvendt til kvalificerede installatører og servicepersonale.

	FORSIGTIG Fare for elektrisk stød - må ikke åbnes.	
FORSIGTIG: Med henblik på at reducere risikoen for elektrisk stød, må arbejdet ikke fjernes. Indeholder ingen komponenter relevante for brugeren. Anvend autoriseret servicepersonale ved alle serviceeftersyn.		

VEILIGHEIDSINFORMATIE

De woorden **WAARSCHUWING** (WARNING) en **VOORZICHTIG** (CAUTION) welke in de handleiding en op het apparaat voorkomen, waarschuwen U voor belangrijke veiligheidsinformatie. Zij hebben de volgende betekenis:

WAARSCHUWING: De betreffende informatie waarschuwt U voor omstandigheden die kunnen leiden tot defecten of beschadigingen aan apparaten als de instructies niet volledig worden opgevolgd. (WARNING)

VOORZICHTIG: De betreffende informatie instrueert U hoe U defecten aan apparatuur kunt voorkomen of hoe U omstandigheden kunt vermijden die kunnen resulteren in schade als de juiste stappen niet worden opgevolgd. (CAUTION)

Produkt informatie en handleiding hanteren onderstaande internationaal erkende symbolen om veiligheidsinstructies aan te geven.



De bliksemschicht in een driehoek wordt gebruikt om de gebruiker te attenderen op ongetoede "gevaarlijke spanning" in het apparaat of bij de aansluitklemmen, die het risico van een elektrische schok kunnen geven.



Het uitroepsteken in een driehoek wordt gebruikt om de gebruiker te attenderen op belangrijke installatie-, gebruiks- en onderhoudsinstructies in de beschrijving die bij het apparaat hoort.

WAARSCHUWING: OM HET RISICO VAN BRAND OF EEN ELECTRISCHE SCHOK TE VERMIJDEN DIENT U HET APPARAAT NIET AAN VOCHT BLOOT TE STELLEN. (WARNING)

VOORZICHTIG: Installatie van dit apparaat dient te geschieden door gekwalificeerd personeel en dient te geschieden conform de plaatselijke voorschriften. (CAUTION)



Modificaties en aanvullende informatie waar in de handleiding naar wordt verwezen, dient alleen voor gebruik door gekwalificeerd personeel.

	VOORZICHTIG. Risico van elektrische schok. Niet openen.	
Waarschuwing: Om het risico van een elektrische schok te vermijden het apparaat niet openen. Er zijn geen, door gebruiker, vervangbare onderdelen in dit apparaat. Service overlaten aan gekwalificeerd service personeel.		

TURVALLISUUSTIEDOTE

Sanat **VAROITUS** (WARNING) ja **HUOMIO** (CAUTION), jotka esiintyvät manuaalissa ja itse laitteissa, ilmoittavat tärkeästä turvallisuusinformaatiosta. Näillä sanoilla on seuraava merkitys:

VAROITUS: Yhteisössä oleva informaatio varoittaa olosuhteista, jotka saattavat johtaa vakaviin vammoihin tai laitteen vaurioitumiseen, mikäli ohjeita ei täysin noudateta. (WARNING)

HUOMIO: Yhteisössä oleva informaatio neuvoo, miten laitteen vaurioituminen voidaan ehkäistä tai miten voidaan välttää olosuhteita, jotka voivat johtaa lieviin vammoihin, mikäli ohjeita ei noudateta. (CAUTION)

Tuotteessa tai käyttöohjeessa voidaan käyttää seuraavia alla määriteltyjä kansainvälisiä symboleja, jotka viittaavat turvallisuusinformaatioon.



Kolmion sisällä olevan nuolipäähän selame varoittaa käyttäjää laitteen sisällä tai liitännöissä olevasta eristämättömästä vaarallisesta jännitteestä, joka saattaa olla tarpeeksi suuri aiheuttaakseen sähköiskun vaaran.



Kolmion sisällä oleva huutomerkkinä tarkoitusena on ilmoittaa käyttäjälle tärkeistä asennusta, käyttöä tai huoltoa koskevista ohjeista laitteen mukana seuraavassa kirjallisuudessa.

VAROITUS: ÄLÄ ALTISTA LAITETTA SATEELLE TAI KOSTEUELLE TULIPALON JA SÄHKÖISKUN VAARAN VUOKSI. (WARNING)

HUOMIO: Laitteen asentaminen tulisi jättää ammattitaitoisen henkilön suoritettavaksi ja asennuksessa tulee noudattaa kaikkia paikallisia säännöksiä. (CAUTION)



Tässä manuaalissa oleva informaatio, joka koskee muutostöitä ja lisälaitteita, on tarkoitettu vain ammattitaitoisten asennus- ja huoltohenkilöiden käyttöön.

	HUOMIO Sähköiskun vaara, älä avaa.	
HUOMIO: ÄLÄ AVAA KANTTA SÄHKÖISKUN VAARAN VUOKSI EI SISÄLLÄ KÄYTTÄJÄN HUOLLETTAVIA OSIA JÄTÄ HUOLTO AMMATTITAITOISELLE HENKILÖKUNNALLE		

SIKKERHETS INFORMASJON

Når ordene **ADVARSEL** (WARNING) og **VIKTIG** (CAUTION) blir brukt i manualen og på produktet, gjelder det informasjon som har med brukernes sikkerhet å gjøre. Ordene har følgende mening:

ADVARSEL: (WARNING) Tilhørende informasjon viser til forhold som kan resultere i alvorlige skader eller ødeleggelser hvis anvisningene ikke følges nøye.

VIKTIG: (CAUTION) Tilhørende informasjon forteller deg hvordan du skal unngå feil på utstyret, eller unngå situasjoner som kan resultere i mindre skader.

Produkt merkingen og bruksanvisningen bruker internasjonale symboler for å merke punkter som er viktige for brukernes sikkerhet.



Lyntet i en triangel advarer brukeren om isolert "farlig spenning" inne i apparatet, eller tilkoblings terminaler som kan gi støt.



Etter utropsteget i en triangel følger informasjon som er viktig når det gjelder installasjon, bruk og vedlikehold (service) av apparatet.

ADVARSEL: (WARNING) FOR Å REDUSERE FAREN FOR BRANN ELLER STØT MÅ APPARATET IKKE UTSETTES FOR VANN ELLER FUKTIGHET.

VIKTIG: (CAUTION) Installasjon av apparatet skal foretas av autorisert installatør etter gjeldende forskrifter.



Modifikasjoner og tillegg informasjon som følger er kun for kvalifiserte installatører eller servicepersonell.



VIKTIG
FARE FOR STØT,
MÅ IKKE DEMONTERES.



VIKTIG: For å unngå faren for støt, må ingen dekaler fjernes
ingen interne deler skal justeres eller repareres av bruker.
Overtatt service til autorisert personell.

SÄKERHETS INFORMATION

Orden **VARNING** (WARNING) och **OBSERVERA** (CAUTION) vilka används i denna manual och på apparaten, är menade att uppmärksamma viktig säkerhetsinformation. Dessa ord har följande betydelse.

VARNING: (WARNING) Information som uppmärksammar på omständigheter som kan resultera i allvarlig personskada eller skada på egendom om instruktionerna ej följs.

OBSERVERA: (CAUTION) Information som uppmärksammar på instruktioner om hur skada på utrustning eller hur situationer där lättare personskador kan uppstå undviks.

Följande internationellt använda ord och symboler används i handboken och på märkningar på produkten för att uppmärksamma användare på viktiga säkerhetsinstruktioner.



En blixn med pil, innesluten i en triangel, menad att uppmärksamma användare på närvaron av isolerade "farliga spänningar" i apparaten eller på anslutningskontakter vilka har tillräcklig styrka för att medföra risk för elektrisk stöt.



Ett utropstecken, innesluten i en triangel, menad att uppmärksamma användare på viktiga installations, handhavande eller underhålls-instruktioner i medföljande dokumentation.

VARNING: (WARNING) FÖR ATT MINSKA RISKEN FÖR BRAND ELLER ELEKTRISK STÖT, UTSÄTT EJ APPARATEN FÖR FUKT ELLER VÄTSKA.

OBSERVERA: (CAUTION) Installation av denna apparat skall utföras av kvalificerad installatör samt enligt alla gällande lokala bestämmelser.



Eventuella modifieringsinstruktioner och annan information av teknisk art i denna manual är endast avsedd att användas av kvalificerad installatör och servicepersonal.



OBSERVERA
RISK FÖR ELEKTRISK STÖT
FÄR EJ ÖPPNAS



OBSERVERA: FÖR ATT MINSKA RISKEN FÖR ELEKTRISK STÖT, AVLÖSN EJ LOCKET.
INGA AV ANVÄNDARE UTBYTBARA ELLER REPARERBARA KOMPONENTER INUTI DENNA APPARAT.
ALL SERVICE PÅ DENNA APPARAT SKALL UTFÖRAS AV KVALIFICERAD PERSONAL.

ΠΛΗΡΟΦΟΡΙΕΣ ΑΣΦΑΛΕΙΑΣ

Οι λέξεις **ΚΙΝΔΥΝΟΣ** (WARNING) και **ΠΡΟΣΟΧΗ** (CAUTION) που αναφέρονται μέσα στο εγχειρίδιο και στη συσκευή, επικεντρώνουν την προσοχή σε σημαντικές πληροφορίες ασφαλείας. Οι λέξεις αυτές έχουν την παρακάτω σημασία.

ΚΙΝΔΥΝΟΣ: Η αναγραφόμενη πληροφορία επιστράτη την προσοχή σας σε καταστάσεις που θα μπορούσαν να έχουν σαν αποτέλεσμα σοβαρό τραυματισμό ή καταστροφή της ιδιοκτησίας αν οι οδηγίες δεν ακολουθηθούν κατάλληλα.

ΠΡΟΣΟΧΗ: Η αναγραφόμενη πληροφορία σας καθοδηγεί πώς να προλάβετε καταστροφή του εξοπλισμού ή πώς να αποφύγετε καταισυχίες που θα μπορούσαν να έχουν σαν αποτέλεσμα μικροτραυματισμούς αν δεν ακολουθηθούν τα σωστά βήματα.

Στις εγγραφές των προϊόντων και στο εγχειρίδιο λειτουργίας, χρησιμοποιούνται τα συνήθως αναγνωρισμένα σύμβολα, των οποίων ο ορισμός δίνεται παρακάτω έτσι ώστε να υπογραμμιστούν τα μηνύματα ασφαλείας.



Η φωτεινή αναλαμπή με σύμβολο το βέλος, μέσα στο τρίγωνο, έχει σκοπό να επιστήσει την προσοχή του χρήστη, στην ύπαρξη μη-μηνυμένης « επικίνδυνης ισχύος ρεύματος » στο εσωτερικό της συσκευής ή στις άκρες σύνδεσης οι οποίες μπορεί να έχουν αρκετό μέγεθος ώστε να περιέχουν κίνδυνο ηλεκτροπληξίας.



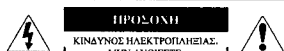
Το επεξηγηματικό σημείο, μέσα στο τρίγωνο, έχει σκοπό να επιστήσει την προσοχή του χρήστη στις σημαντικές οδηγίες εγκατάστασης, λειτουργίας και συντήρησης (service) που περιέχονται στα φυλλάδια που συνοδεύουν την συσκευή.

ΚΙΝΔΥΝΟΣ: Για να αποφύγετε τον κίνδυνο φωτιάς ή ηλεκτροπληξίας, μην εκθέτετε αυτή τη συσκευή σε βροχή ή σε υγρασία.

ΠΡΟΣΟΧΗ: Η εγκατάσταση αυτής της συσκευής θα πρέπει να γίνει από εξειδικευμένο άτομο και θα πρέπει να προσαρμόζεται σε όλους τους εφαρμοσμένους τοπικούς κώδικες.



Οι τροποποιήσεις και οι προληπτικές πληροφορίες για τον εξοπλισμό, που αναφέρονται σε αυτό το εγχειρίδιο, προορίζονται για χρήση μόνο από εξειδικευμένα στην εγκατάσταση και στο service, άτομα.



ΠΡΟΣΟΧΗ
ΚΙΝΔΥΝΟΣ ΗΛΕΚΤΡΟΠΛΗΞΙΑΣ.
ΜΗΝ ΑΝΟΙΞΕΤΕ.



ΠΡΟΣΟΧΗ: ΓΙΑ ΝΑ ΜΗΔΕΝΕΤΕ ΤΟΝ ΚΙΝΔΥΝΟ ΗΛΕΚΤΡΟΠΛΗΞΙΑΣ, ΜΗΝ ΜΕΤΑΚΙΝΗΣΕΤΕ ΤΟ ΚΑΛΥΜΜΑ.
ΔΕΝ ΠΑΡΕΧΟΝΤΑΙ ΑΝΤΑΛΛΑΚΤΙΚΑ SERVICE ΣΤΟΝ ΧΡΗΣΤΗ
ΓΙΑ SERVICE ΑΝΑΦΕΡΟΜΕΝΟ ΣΤΟ ΕΓΧΕΙΡΙΔΙΟ ΣΕΡΒΙΣ.

INFORMAÇÃO SOBRE SEGURANÇA

As palavras **ADVERTÊNCIA** (WARNING) e **PRECAUÇÃO** (CAUTION) neste manual, e no dispositivo, alertam para importantes informações sobre segurança. Estas palavras significam o seguinte:

ADVERTÊNCIA: Informação relacionada que alerta sobre condições que poderão resultar em lesões sérias ou prejuízo, se as instruções não forem seguidas adequadamente.

PRECAUÇÃO: Informação relacionada que instrui como prevenir danos ao equipamento ou como evitar condições que poderão resultar em lesões leves, se os passos não forem seguidos adequadamente.

As etiquetas do produto e do manual de operações podem usar os símbolos internacionalmente reconhecidos definidos abaixo para advertir mensagens de segurança.



símbolo do relâmpago com uma seta, dentro de um triângulo, tem o fim de alertar o usuário a presença de "voltagem perigosa" sem isolamento dentro da caixa isolamento do aparelho ou nos terminais de ligação que podem ter a magnitude suficiente que constitui um risco de choque elétrico.



ponto de exclamação, dentro de um triângulo, tem o fim de alertar o usuário sobre instruções importantes de instalação, operação e manutenção (serviços) na literatura que acompanha o aparelho.

ADVERTÊNCIA: PARA REDUZIR O RISCO DE INCÊNDIO OU CHOQUE ELÉCTRICO, NÃO EXPONHA ESTE APARELHO A CHUVA OU HUMIDADE.

PRECAUÇÃO: A instalação deste aparelho deve ser feita por um profissional qualificado e deve obedecer a todos os códigos locais aplicáveis.



Modificação e informação sobre equipamento adicional citados neste manual são para o uso exclusivo do pessoal qualificado de instalação e manutenção.

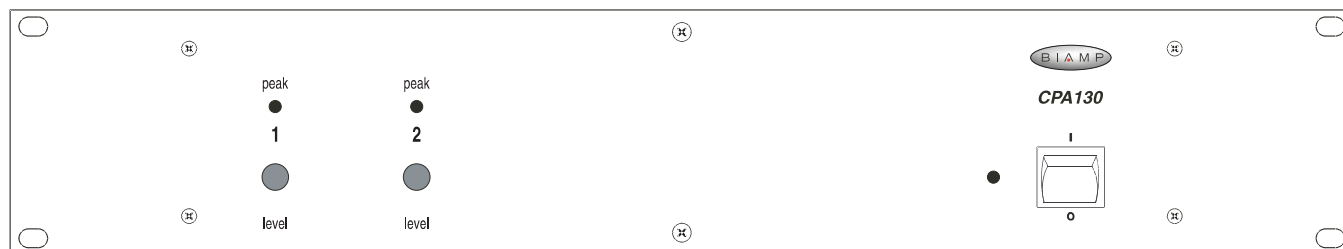


PRECAUÇÃO
RISCO DE CHOQUE ELÉCTRICO
NÃO ABRA



PRECAUÇÃO: PARA REDUZIR O RISCO DE CHOQUE ELÉCTRICO, NÃO REMOVA A TAMPA.
PARTES INTERNAS NÃO MANTIDAS PELO USUÁRIO.
ENCAMINHE A MANUTENÇÃO PARA PESSOAL DE SERVIÇOS QUALIFICADO.

FRONT PANEL



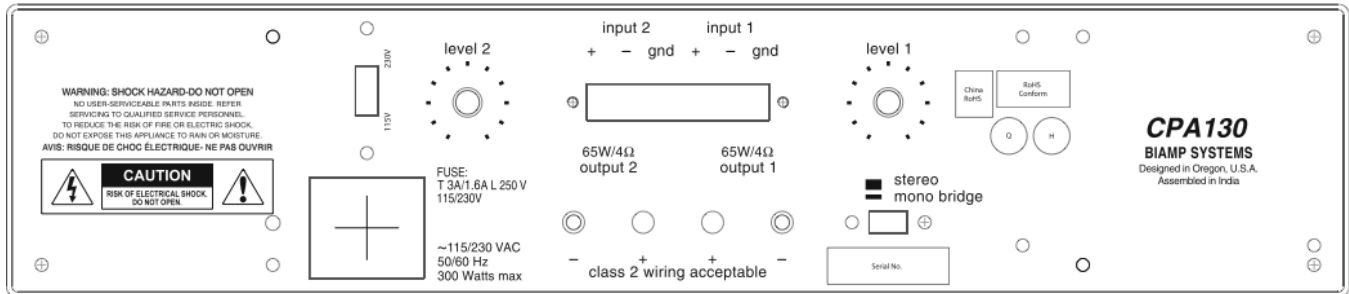
Channel Peak Indicators: These red LED indicators will light when their respective channel amplifiers have reached maximum output. To avoid clipping distortion, and to protect speakers from being damaged, reduce the input level until the Peak Indicator no longer lights.

Channel Level Control Mounting Holes: These holes are provided for optional front panel mounting of the channel level controls (see Internal Modifications: Front Panel Level Controls on page 9). **NOTE:** *Modifications must be performed by qualified service professionals.*

Power Indicator: This green LED indicator will light when AC power is applied to the unit (see Precautions on page 8).

AC Power Switch: This switch applies AC power to the unit (see Precautions on page 8).

REAR PANEL



Autoformer Mounting Holes: These holes are for mounting of optional autoformers to the rear panel of the CPA130. Autoformers allow the CPA130 to be used to drive 25V, 70V, or 100V distributed speaker systems (see 5-Way Speaker Binding Posts below).

AC Power Entrance: This receptacle accepts the detachable AC Power Cord. The AC Power Cord is for connection to three-prong grounded AC outlets. **CAUTION:** *Do not remove or defeat the ground prong on the AC Power Cord, as this constitutes a shock hazard.* The Fuse Clip may be removed by first detaching the AC Power Cord, then prying the Fuse Clip out from above, using a flat-blade screwdriver in the notch provided. The Fuse Clip contains the standard fuse for the selected AC operational voltage. The standard fuse is held in the clip, and becomes the actual AC fuse when the Fuse Clip is installed. Replace the standard fuse only with the same value and type. For ~115 VAC operation, use a T 3A L 250V fuse. For ~230 VAC operation, use a T 1.6A L 250V fuse.

Voltage Selector Switch: For 115 VAC operation, slide to the left position toward 115V. For 230 VAC operation, slide to the right position toward 230V.

Channel Level Controls: These controls adjust the input signal level for each channel. After setting appropriate levels at the signal source, then adjust the Channel Level Controls for the desired output volume from the CPA130. In mono-bridge mode, Channel 1 becomes the active input and Channel 2 input is inactive. As an option, the Channel Level Controls may be mounted to the CPA130 front panel (see Internal Modifications: Front Panel Level Controls on page 9). **NOTE:** *Modifications must be performed by qualified service professionals.*

Input Barrier Strip: These barrier strip screw terminals are for connection of line-level input signals to the channels. For balanced inputs, connect High to (+), Low to (-), and Ground to (gnd). For unbalanced inputs, connect High to (+) and Ground to both (-) & (gnd). In mono-bridge mode, Channel 1 becomes the active input and the Channel 2 input is inactive.

5-Way Speaker Binding Posts: These 5-way binding posts are for connection of speaker loads to the CPA130. In stereo mode, the red (+) terminal of each channel is for connection to speaker positive, and the black (-) terminal for each channel is for connection to speaker negative. The CPA130 will deliver up to 65 Watts per channel into 4 ohm minimum loads. In mono-bridge mode, the red (+) terminal of Channel 1 is for connection to speaker positive, and the red (+) terminal of Channel 2 is for connection to speaker negative. The CPA130 will deliver up to 130 Watts mono-bridged into an 8 ohm minimum load. Autoformers are available from Biamp Systems, which allow the CPA130 to be used to drive 25V, 70V, or 100V distributed speaker systems (see Internal Modifications: High-Pass Filter on page 5). When using the CPA130 in stereo mode, the appropriate autoformer for each channel is a DT-2A. When using the CPA130 in mono-bridge mode, the appropriate autoformer is a DT-3A.

Mono-Bridge Switch: When depressed, this switch selects the mono-bridge mode of operation. In mono-bridge mode, Channel 1 becomes the active input and the Channel 2 input is inactive. The red (+) speaker terminal of Channel 1 is for connection to speaker positive, and the red (+) speaker terminal of Channel 2 is for connection to speaker negative. The CPA130 will deliver up to 130 Watts mono-bridged into an 8 ohm minimum load.

PRECAUTIONS

Be sure that power to the CPA130 is turned off when making all connections. High voltages can be present at the speaker terminals, and static pops or broken ground connections on cables can cause speaker damage.

Use speaker wire of sufficient gauge to prevent power loss and damping factor reduction. Larger size wire has a lower resistance and permits longer cable runs. Use 16 or 18 gauge wire for cable runs up to 20 feet. For runs 20–80 feet, use 14 gauge wire. For runs longer than 80 feet, use 10 or 12 gauge wire.

Check the AC voltage before connecting the AC cord. The voltage selector is indicated on the rear panel at the power cord receptacle. The CPA130 is shipped from the factory set for 110VAC operation. If it is necessary to set the AC voltage selector for 240VAC operation, be sure to replace the AC fuse with the appropriate value.

The High-Pass Filters must be enabled whenever using the CPA130 for driving distributed speaker systems (see Internal Modifications: High-Pass Filter on page 5).

Never connect the red (+) speaker binding posts directly together. This can result in internal damage to the amplifier.

Before turning power on, set the CPA130 level controls to the fully counter-clockwise (off) position.

The CPA130 is designed to be installed in a standard 19" equipment rack. The amplifiers have cooling vents on both the top and bottom panels. Do not block the cooling vents in any way. When mounting the CPA130 in a rack, leave at least one rack-space above and below the amplifier to allow proper air flow. Do not use a CPA 130 in a closed rack. In situations with high ambient temperatures, particularly where multiple amplifiers are mounted in the same rack, it may be necessary to use fans to cool the rack. Best results are attained if the fans blow cool air in from the bottom of the rack, up through the amplifiers, expelling the heated air at the top.

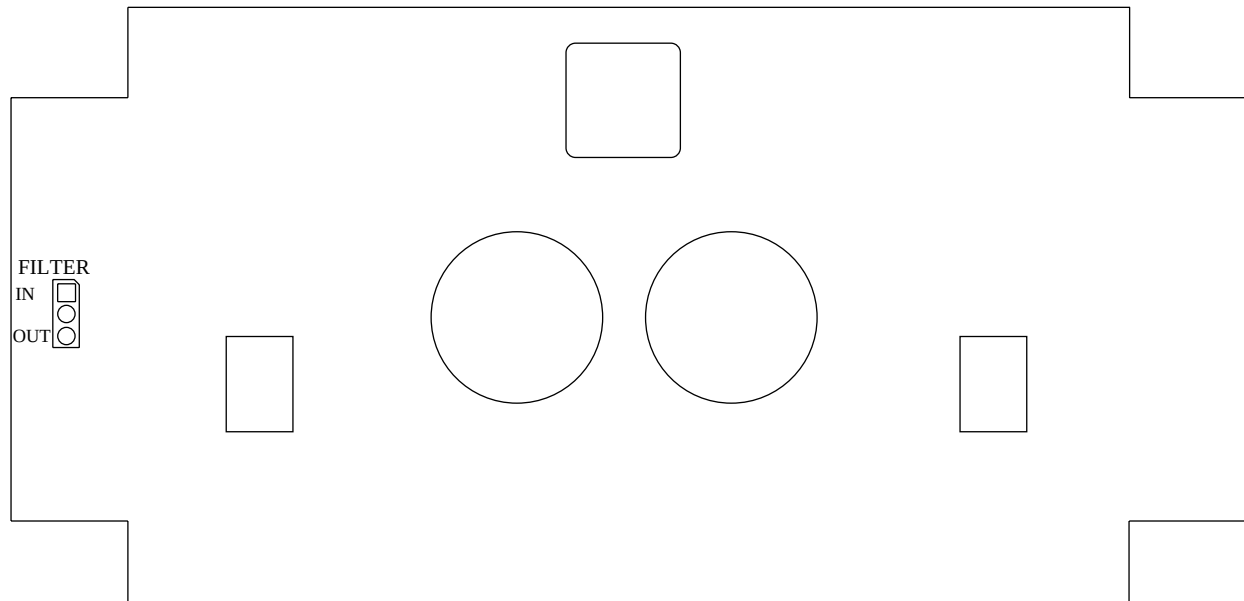
If the green LED indicator next to the power switch does not light when the power switch is turned on, turn the power switch off and check the AC power cord connections. If the power cord connections are complete, but the indicator still does not light, disconnect the CPA130 from AC power and check the AC fuse. If the fuse needs to be replaced, use the same value and type fuse only. If the AC fuse continues to fail, the amplifier may require service.

Once power is turned on, slowly advance the level controls clockwise. If no sound is heard, turn the level controls back to their original counter-clockwise position and check to confirm there is an input signal. Also check for proper wiring at all input and output connections, and verify that the cables being used are undamaged and are in good condition.

If the CPA130 should require service, please contact Biamp Systems Customer Service at 1-800-826-1457 or (503) 641-7287.

INTERNAL MODIFICATIONS

NOTE: Modifications must be performed by qualified service professionals. Disconnect the CPA130 from the AC outlet. Remove the top panel to access internal modifications. The diagram below shows the printed circuit board (PCB) and components as they appear on each amplifier channel module.



High-Pass Filter: This two-position jumper strap enables or disables a 18dB/octave 180Hz High-Pass Filter for that channel of the amplifier. When the strap is in the "IN" (up) position, the High-Pass Filter is enabled. When the strap is in the "OUT" (down) position, the High-Pass Filter is disabled. The High-Pass Filters must be enabled whenever the CPA130 is used for driving distributed speaker systems. This eliminates excessive current at low frequencies due to speaker transformer inductance, which can cause distortion or damage to the amplifier. If the CPA130 is used in mono-bridge mode to drive a distributed speaker system, it is only necessary for the Channel 1 High-Pass Filter to be enabled. The CPA130 is shipped from the factory with the High-Pass Filters disabled ("OUT").

Front Panel Level Controls: The Channel Level Controls may be moved to the front panel of the CPA130. Remove the plugs from the front panel mounting holes (save them for the rear panel mounting holes). Remove the knobs from the level controls. Remove the nuts from the level controls using a 11mm (7/16") nut driver. Move the level controls to the front panel mounting holes (make sure that Channel 1 and Channel 2 level controls are in their proper locations). Re-install nuts and knobs (hold onto controls to avoid twisting wires). Install plugs in rear panel mounting holes. Check wire routing to avoid pinching or over-heating of wires.

SPECIFICATIONS

Maximum Power Output (@ 2kHz):

both channels driven into 4 ohms	65 watts/channel
both channels driven into 8 ohms	40 watts/channel
mono bridge into 8 ohms	130 watts

Signal-to-Noise Ratio (20Hz~20kHz):

rated power into 4 ohms	> 96dB
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Total Harmonic Distortion:

20Hz~20kHz @ rated power	< 0.2%
2kHz @ rated power (typical)	< 0.1%

Intermodulation Distortion (SMPTE):

< 0.35%

Frequency Response (20Hz~20kHz):

+0/-1dB

Input Impedance:

balanced	20k ohms
unbalanced	10k ohms

Input Sensitivity:

0.775 Vrms (0dBu)

Power Requirements:

120/240 VAC, 50/60Hz

Power Consumption:

300 watts max.

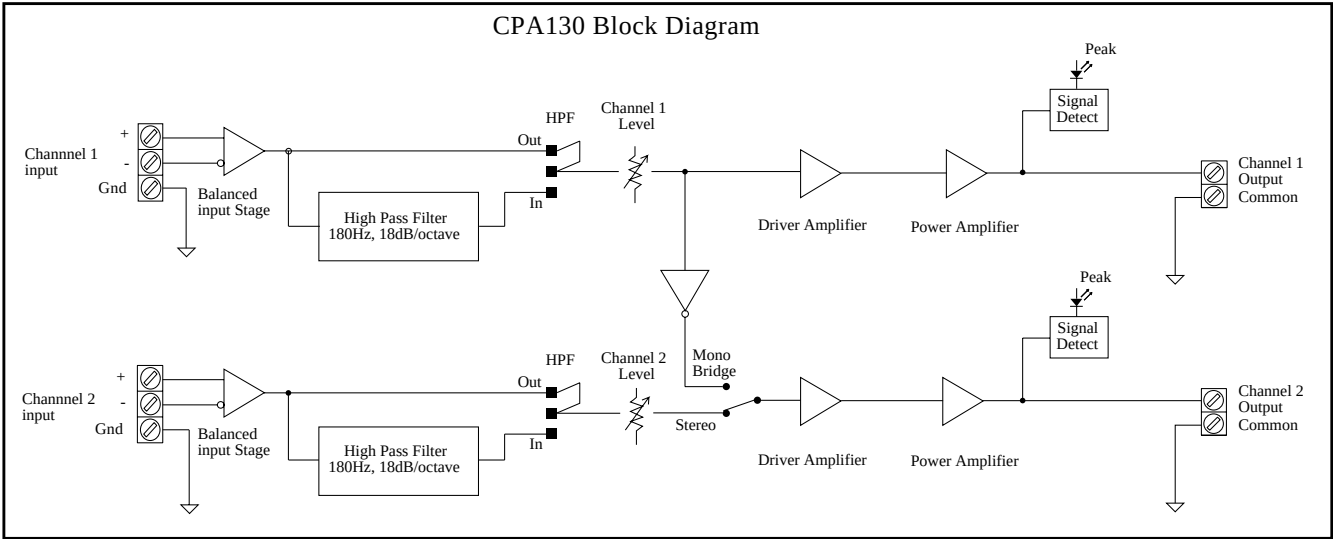
Dimensions:

height (2 rack-spaces)	3.5 inches (89mm)
width	19 inches (483mm)
depth	10 inches (254mm)

Weight:

22 lbs. (9.98kg)

BLOCK DIAGRAM



WARRANTY

BIAMP SYSTEMS IS PLEASED TO EXTEND THE FOLLOWING 5-YEAR LIMITED WARRANTY TO THE ORIGINAL PURCHASER OF THE PROFESSIONAL SOUND EQUIPMENT DESCRIBED IN THIS MANUAL

1. BIAMP Systems warrants to the original purchaser of new products that the product will be free from defects in material and workmanship for a period of 5 YEARS from the date of purchase from an authorized BIAMP Systems dealer, subject to the terms and conditions set forth below.
2. If you notify BIAMP during the warranty period that a BIAMP Systems product fails to comply with the warranty, BIAMP Systems will repair or replace, at BIAMP Systems' option, the nonconforming product. As a condition to receiving the benefits of this warranty, you must provide BIAMP Systems with documentation that establishes that you were the original purchaser of the products. Such evidence may consist of your sales receipt from an authorized BIAMP Systems dealer. Transportation and insurance charges to and from the BIAMP Systems factory for warranty service shall be your responsibility.
3. This warranty will be VOID if the serial number has been removed or defaced; or if the product has been altered, subjected to damage, abuse or rental usage, repaired by any person not authorized by BIAMP Systems to make repairs; or installed in any manner that does not comply with BIAMP Systems' recommendations.
4. Electro-mechanical fans, electrolytic capacitors, and normal wear and tear of items such as paint, knobs, handles, and covers are not covered under this warranty.
5. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. BIAMP SYSTEMS DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.
6. The remedies set forth herein shall be the purchaser's sole and exclusive remedies with respect to any defective product.
7. No agent, employee, distributor or dealer of Biamp Systems is authorized to modify this warranty or to make additional warranties on behalf of Biamp Systems. statements, representations or warranties made by any dealer do not constitute warranties by Biamp Systems. Biamp Systems shall not be responsible or liable for any statement, representation or warranty made by any dealer or other person.
8. No action for breach of this warranty may be commenced more than one year after the expiration of this warranty.
9. BIAMP SYSTEMS SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, INCLUDING LOST PROFITS OR LOSS OF USE ARISING OUT OF THE PURCHASE, SALE, OR USE OF THE PRODUCTS, EVEN IF BIAMP SYSTEMS WAS ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Biamp Systems
9300 S.W. Gemini Drive
Beaverton, Oregon 97008
(503) 641-7287

EU RoHS COMPLIANT



This Biamp product, including all attendant cables and accessories supplied by Biamp, meets all requirements of EU Directives 2002/95/EC of January 27, 2003, and 2005/618/EC of August 18, 2005, the EU RoHS Directives. An EU RoHS Materials Content Declaration document may be obtained at www.biamp.com

(This information is presented to comply with the requirements of Chinese law SJ/T11363-2006)

有害物质表 (Hazardous Substances Table)

Biamp Systems Corporation

音频放大器 (Audio Amplifier)

CPA130

部件名称 (Part Name)	有毒有害物质或元素 (Substances)					
	Pb 铅	Hg 汞	Cd 镉	Cr+6 六价铬	PBB	PBDE
设备机箱 (Equipment Chassis)	X	O	X	O	O	O
电源线 (Power Cord)	O	O	O	O	O	O
插拔式接线端子 (Plug-in Terminal Blocks)	O	O	O	O	O	O
手册和其他书面文档 (Manual and Paper Documents)	O	O	O	O	O	O
包装箱和所有包装材料 (Box and Packing Materials)	O	O	O	O	O	O
O: 表示该部件所有均质材料中的这种有毒有害物质低于 SJ/T11363-2006 的限制要求。 X: 表示该部件中至少有一种均质材料所含的这种有毒有害物质高于 SJ/T11363-2006 的限制要求。 在电触头和（或）镀镉所含的均质材料中，镉及其化合物的含量可以超过 0.01%，但欧盟指令 91/338/EEC（根据欧盟指令 76/769/EEC）限制销售和使用某些危险物质和制剂部分中所禁止的用途除外 在以下一种或多种物质所含的均质材料中，铅及其化合物的含量可以超过 0.1%： 1) 电子元器件中玻璃内所含的铅 2) 铅在钢材中是作为一种合金元素，含量可达 0.35% 3) 铅在铝材中是作为一种合金元素，含量可达 0.4% 4) 铅在铜材中是作为一种合金元素，含量可达 4% 5) 高熔点类焊料中的铅（即铅料合金，铅含量超过 85%） 6) 电子陶瓷部件内的铅 7) 由两种以上元素组成的焊料中所含的铅，用于连接针脚和微处理器包装，其中铅的含量超过 80% 但低于 85% 8) 顺应针连接系统内的铅 9) 倒装芯片封装中半导体芯片及载体之间形成可靠连接所用焊料中的						
 在正常使用情况下，中国环保使用期限为 10 年，条件是： • 环境温度为 0-40C (32-104°F) • 湿度为 0-95%，无凝结 • 海拔高度为 0-10,000 英尺 • 气流不受阻碍 • 没有水或其他液体进入任何部件 • 电源为 115/230V~, 50/60Hz • 部件没有损坏（损坏部件应立即修理） • 由工厂授权人员使用批准的材料进行所有维修						